Module 5: Hands-On: Installing Ansible on AWS

Pre-requisites:

Step 1: Ensure Python is installed on both the machines i.e., Master and Slave. By default AWS Ubuntu images have Python installed. You can skip this step if you are setting up Ansible on AWS. On other machines, install Python using the following command:

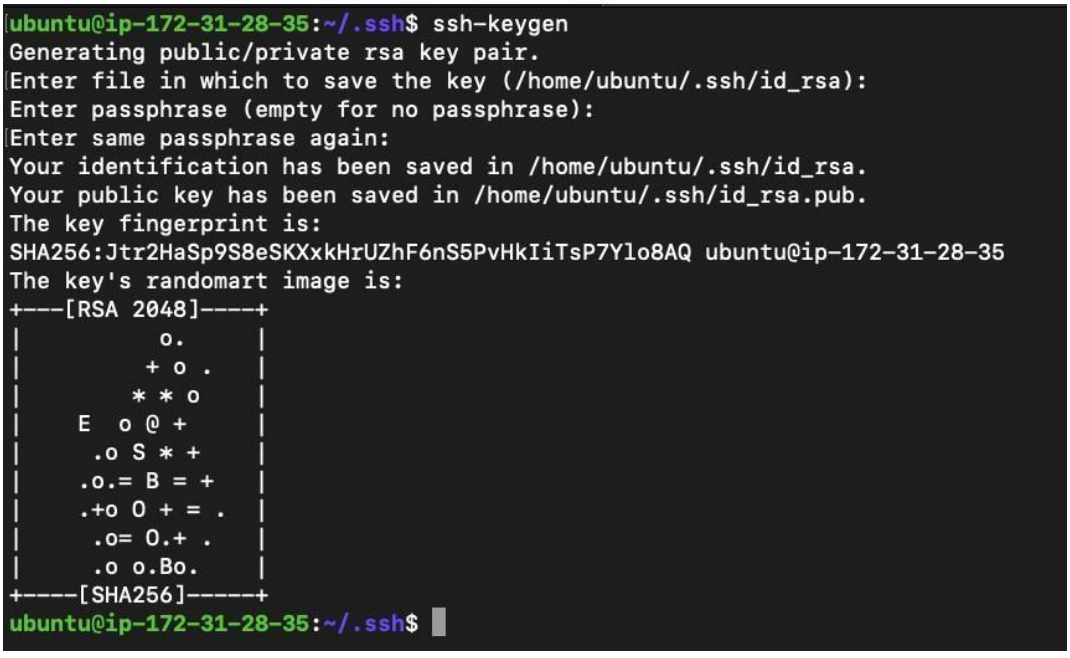
```
$ sudo apt-get install python3
```

Step 2: Enable keyless SSH access between Ansible Master and Slave. To accomplish this, do the following:

On Master, pass the following command:

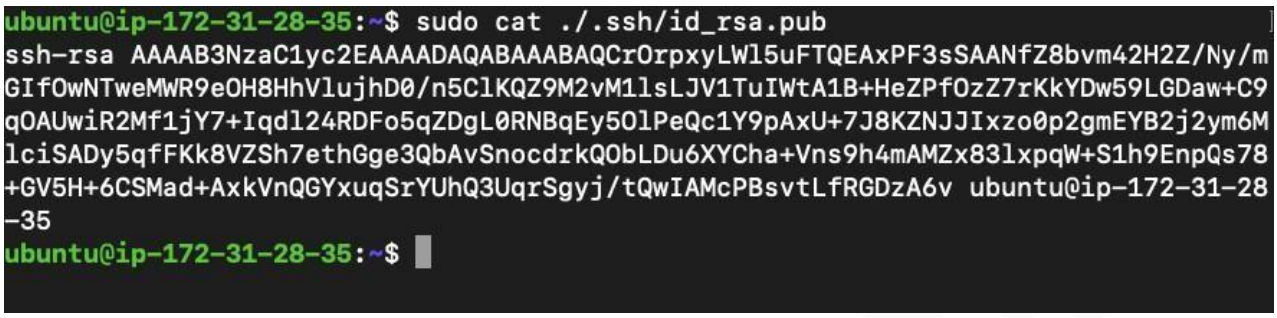
```
$ ssh-keygen
```

After this, keep the default values and keep on pressing enter till you reach the following screen:



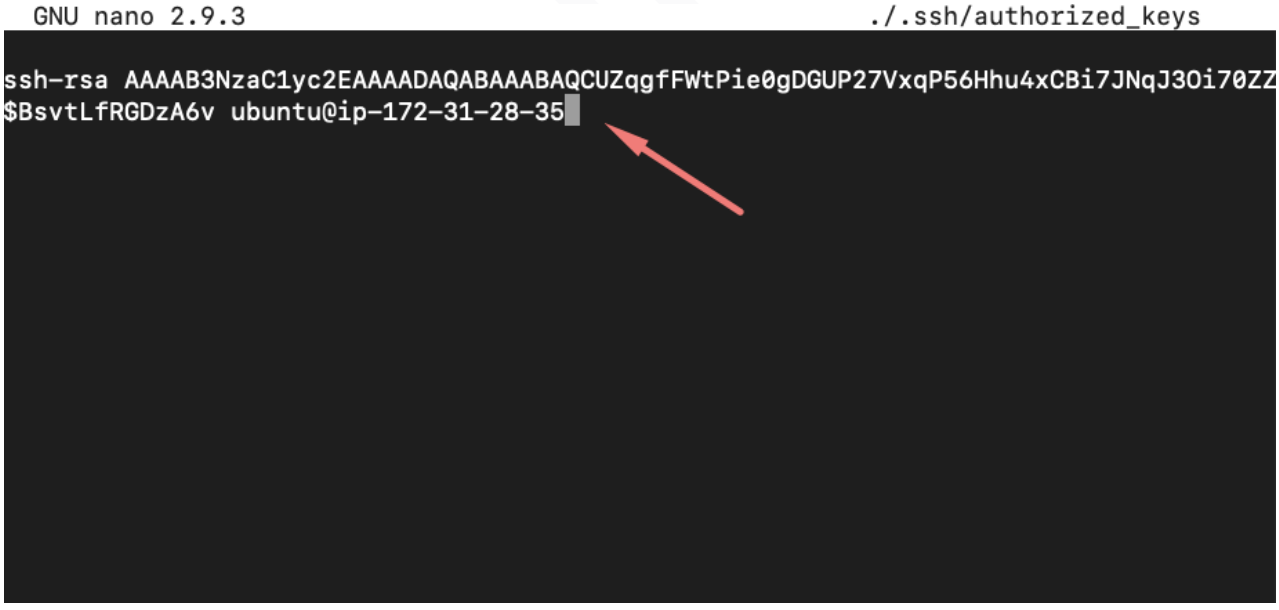
Step 3: Once done print id_rsa.pub file using the command:

```
$ sudo cat ./.ssh/id_rsa.pub
```



Step 4: Copy the output of this file and paste it in the slave machine's authorized_keys file. You can do that using the following command. Once inside the file, paste the output.

```
$ sudo nano ./.ssh/authorized_keys
```



Insert the new entry in the second line of the file. Save and exit.

Keyless access has now been configured between your Ansible master and slave. You can verify by doing a SSH from your master to your slave and you should be freely able to do so.

```
ubuntu@ip-172-31-24-91:~$ ssh ubuntu@34.217.207.113
Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 4.15.0-1065-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Tue Jun  9 13:18:18 UTC 2020

  System load:  0.0               Processes:           89
  Usage of /:   13.9% of 7.69GB   Users logged in:     1
  Memory usage: 15%               IP address for eth0: 172.31.28.35
  Swap usage:   0%


0 packages can be updated.
0 updates are security updates.


Last login: Tue Jun  9 12:24:20 2020 from 34.220.210.174
ubuntu@ip-172-31-28-35:~$
```

With this, you have now successfully configured the pre-requisites.

Installing Ansible on Master:

Step 1: Pass the following commands to install Ansible on the Master:

```
$ sudo apt update
$ sudo apt install software-properties-common
$ sudo apt-add-repository --yes --update ppa:ansible/ansible
$ sudo apt install ansible
```

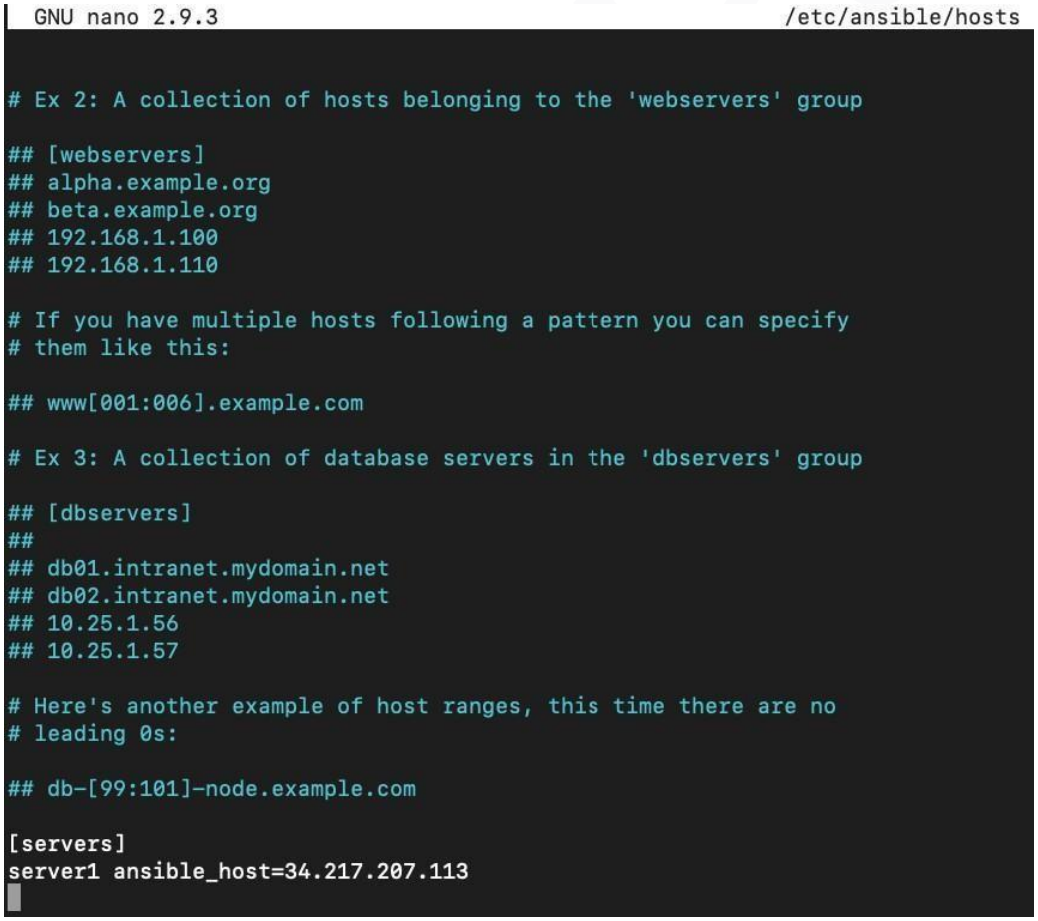

Step 2: Next, configure the slave by creating the hosts file in the Master. To edit the file, pass the following command:

```
$ sudo nano /etc/ansible/hosts
```

Once inside, enter the following syntax to add a slave. In this syntax, servers is the group and server1 is the slave machine's name. You can give any name of your choice.

```
[servers]

server1 ansible_host=<slave-ip-address>
```



There will be some sample entries. You can ignore them and add the new values. With this, your ansible configuration is complete.

Step 3: Finally, you can test the Ansible Master-Slave connection by passing the following command:

```
$ ansible -m ping all
```

```
ubuntu@ip-172-31-24-91:~$ ansible -m ping all
server1 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
ubuntu@ip-172-31-24-91:~$
```

If everything is configured correctly, you will get the above output.

